

### **REMARKS**

In response to the Office Action dated March 2, 2007, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance. Prior to entry of this response, Claims 1-21 were pending in the application, of which Claims 1, 6, and 13 are independent. In the Office Action dated March 2, 2007, Claims 1, 3-4, 6-7, 12-16, and 21 was rejected under 35 U.S.C. § 102(b) and Claims 2, 5, 8-11, and 17-20 were rejected under 35 U.S.C. § 103(a). Following this response, Claims 1-21 remain in this application. Applicants hereby address the Examiner's rejections in turn.

I. Rejection of Claims 1, 3-4, 6-7, 12-16, and 21 Under 35 U.S.C. § 102(b)

In the Office Action dated March 2, 2007, the Examiner rejected Claims 1, 3-4, 6-7, 12-16, and 21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 5,936, 963 ("Saussy"). Claims 1, 6, and 13 have been amended, and Applicants respectfully submit that the amendments overcome this rejection and add no new matter.

Amended Claim 1 is patentably distinguishable over the cited art for at least the reason that it recites, for example, "wherein establishing the asymmetric Ethernet communication comprises utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry." Amended Claims 6 and 13 each includes a similar recitation. Support for these amendments can be found in the specification at least on page 5, lines 10-21.

Consistent with embodiments of the invention, an asymmetric Ethernet service may utilize aggregated Ethernet connections to increase bandwidths in data transfer directions while maintaining asymmetry. (See specification page 5, lines 10-12.) For example, an aggregator device may be positioned between a DSLAM containing modems and a downstream link to an Ethernet network. (See specification page 5, lines 12-14.)

In contrast, *Saussy* at least does not disclose the aforementioned recitation. *Saussy* merely discloses an Ethernet to asymmetric converter (EAC) includes an asymmetric link port that receives data packets from an asymmetric link. (See col. 5, lines 3-6.) The EAC forms a connection as an Ethernet port connects to a network node device. (See col. 5, lines 8-11.) In *Saussy*, the EAC provides an algorithm wherein a local Ethernet is ensured of receiving traffic and not being busy. Accordingly, *Saussy* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *Saussy* discloses an EAC receiving data so as to not be busy and is silent regarding aggregated Ethernet connections.

*Saussy* does not anticipate the claimed invention because *Saussy* at least does not disclose "wherein establishing the asymmetric Ethernet communication comprises utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry," as recited by amended Claim 1. Amended Claims 6 and 13 each includes a similar recitation. Accordingly, independent Claims 1, 6, and 13 each patentably distinguishes the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of Claims 1, 6, and 13.

Dependent Claims 3-4, 7, 12, 14-16, and 21 are also allowable at least for the reasons described above regarding independent Claims 1, 6, and 13, and by virtue of their respective dependencies upon independent Claims 1, 6, and 13. Accordingly, Applicants respectfully request withdrawal of this rejection of dependent Claims 3-4, 7, 12, 14-16, and 21.

## II Rejection of Claims 2, 11, and 20 Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected Claims 2, 11, and 20 under 35 U.S.C. § 103(a) as being unpatentable over *Saussy* in view of U.S. Pat. Pub. No. 2003/0198217 ("*Redfern*"). Dependent Claim 2 is patentably distinguishable over the cited art for at least for the reason that it includes, due to its dependency on amended independent Claim 1, "wherein establishing the asymmetric Ethernet communication comprises utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry." Dependent Claims 11 and 20 contain a similar recitation due to their respective dependencies on amended independent Claims 1 and 13. Support for these amendments can be found in the specification at least on page 5, lines 10-21.

Consistent with embodiments of the invention, an asymmetric Ethernet service may utilize aggregated Ethernet connections to increase bandwidths in data transfer directions while maintaining asymmetry. (See specification page 5, lines 10-12.) For example, an aggregator device may be positioned between a DSLAM containing modems and a downstream link to an Ethernet network. (See specification page 5, lines 12-14.)

In contrast, *Saussy* at least does not disclose the aforementioned recitation. *Saussy* merely discloses an Ethernet to asymmetric converter (EAC) includes an asymmetric link port that receives data packets from an asymmetric link. (See col. 5, lines 3-6.) The EAC forms a connection as an Ethernet port connects to a network node device. (See col. 5, lines 8-11.) In *Saussy*, the EAC provides an algorithm wherein a local Ethernet is ensured of receiving traffic and not being busy. Accordingly, *Saussy* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *Saussy* discloses an EAC receiving data so as to not be busy and is silent regarding aggregated Ethernet connections.

In addition, *Redfern* does not overcome *Saussy*'s deficiencies. *Redfern* merely discloses extending upstream data transmission in a band having a lowest frequency by an end user terminal. (See paragraph [0010].) In *Redfern*, a plurality of sets of values are determined and from an estimated loop length, a selection of frequencies and power levels are determined. Accordingly, *Redfern* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *Redfern* discloses utilizing frequency and power levels to extend upstream data transmission and is silent regarding aggregated Ethernet connections.

Combining *Saussy* with *Redfern* would not have led to the claimed invention because *Saussy* and *Redfern*, either individually or in combination, at least do not disclose "wherein establishing the asymmetric Ethernet communication comprises utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry," as included in dependent Claim 2. Dependent Claims 11 and

20 each includes a similar recitation due to their respective dependencies on independent Claims 6 and 13. Accordingly, dependent Claims 2, 11, and 20 each patentably distinguish the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of dependent Claims 2, 11, and 20.

### III. Rejection of Claims 5, 8, and 17 Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected Claims 5, 8, and 17 under 35 U.S.C. § 103(a) as being unpatentable over *Saussy* in view of U.S. Patent No. 6,785,265 ("*White*"). Dependent Claim 5 is patentably distinguishable over the cited art for at least for the reason that it includes, due to its dependency on amended independent Claim 1, "wherein establishing the asymmetric Ethernet communication comprises utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry." Dependent Claims 8 and 17 each contains a similar recitation due to their respective dependencies on amended independent Claims 6 and 13. Support for these amendments can be found in the specification at least on page 5, lines 10-21.

Consistent with embodiments of the invention, an asymmetric Ethernet service may utilize aggregated Ethernet connections to increase bandwidths in data transfer directions while maintaining asymmetry. (See specification page 5, lines 10-12.) For example, an aggregator device may be positioned between a DSLAM containing modems and a downstream link to an Ethernet network. (See specification page 5, lines 12-14.)

In contrast, *Saussy* at least does not disclose the aforementioned recitation. *Saussy* merely discloses an Ethernet to asymmetric converter (EAC) includes an asymmetric link port that receives data packets from an asymmetric link. (See col. 5, lines 3-6.) The EAC forms a connection as an Ethernet port connects to a network node device. (See col. 5, lines 8-11.) In *Saussy*, the EAC provides an algorithm wherein a local Ethernet is ensured of receiving traffic and not being busy. Accordingly, *Saussy* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *Saussy* discloses an EAC receiving data so as to not be busy and is silent regarding aggregated Ethernet connections.

In addition, *White* does not overcome *Saussy*'s deficiencies. *White* merely discloses a DSL access network in which a Asynchronous Transfer Mode (ATM) layer is removed from two interfaces, and replaced with a single Ethernet. (See col. 1, line 66-col. 2, line 1.) In *White*, the ATM is replaced with the Ethernet at a media access control (MAC) layer at the following interfaces: (a) between the customer premises equipment (CPE) and a remote Ethernet device (RED) terminal, and (b) between the RED terminal and a packet data core network. (See col. 2, lines 2-6.) In *White*, ATMs are replaced with a single Ethernet at various interfaces. Accordingly, *White* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *White* discloses replacing ATMs with Ethernets and is silent regarding aggregated Ethernet connections.

Combining *Saussy* with *White* would not have led to the claimed invention because *Saussy* and *White*, either individually or in combination, at least do not disclose "wherein establishing the asymmetric Ethernet communication comprises utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry," as included in dependent Claim 5. Claims 8 and 17 each contain a similar recitation due to their respective dependencies on amended independent Claims 6 and 13. Accordingly, dependent Claims 5, 8, and 17 each patentably distinguishes the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of dependent Claims 5, 8, and 17.

#### IV. Rejection of Claims 9 and 18 Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected Claims 9 and 18 under 35 U.S.C. § 103(a) as being unpatentable over *Saussy* in view of *White* and further in view of U.S. Patent No. 6,243,394 ("*Deng*"). Dependent Claim 9 is patentably distinguishable over the cited art for at least for the reason that it includes, due to its dependency on amended independent Claim 6, "wherein the asymmetric Ethernet communications connection is established by utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining asymmetry." Dependent Claim 18 contains a similar recitation due to its dependency on amended independent Claim 13. Support for the amendments can be found in the specification at least on page 5, lines 10-21.

Consistent with embodiments of the invention, an asymmetric Ethernet service may utilize aggregated Ethernet connections to increase bandwidths in data transfer directions while maintaining asymmetry. (See specification page 5, lines 10-12.) For

example, an aggregator device may be positioned between a DSLAM containing modems and a downstream link to an Ethernet network. (See specification page 5, lines 12-14.)

In contrast, *Saussy* at least does not disclose the aforementioned recitation. *Saussy* merely discloses an Ethernet to asymmetric converter (EAC) includes an asymmetric link port that receives data packets from an asymmetric link. (See col. 5, lines 3-6.) The EAC forms a connection as an Ethernet port connects to a network node device. (See col. 5, lines 8-11.) In *Saussy*, the EAC provides an algorithm wherein a local Ethernet is ensured of receiving traffic and not being busy. Accordingly, *Saussy* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *Saussy* discloses an EAC receiving data so as to not be busy and is silent regarding aggregated Ethernet connections.

In addition, *White* does not overcome *Saussy*'s deficiencies. *White* merely discloses a DSL access network in which a Asynchronous Transfer Mode (ATM) layer is removed from two interfaces, and replaced with a single Ethernet. (See col. 1, line 66-col. 2, line 1.) In *White*, the ATM is replaced with the Ethernet at a media access control (MAC) layer at the following interfaces: (a) between the customer premises equipment (CPE) and a remote Ethernet device (RED) terminal, and (b) between the RED terminal and a packet data core network. (See col. 2, lines 2-6.) In *White*, ATMs are replaced with a single Ethernet at various interfaces. Accordingly, *White* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths



while maintaining symmetry. Rather *White* discloses replacing ATMs with Ethernet and is silent regarding aggregated Ethernet connections.

Furthermore, *Deng* does not overcome *Saussy's* and *White's* deficiencies. *Deng* merely discloses controlling data communication between a local area network (LAN) and a remote device through an ADSL channel. (See col. 1, line 66-col. 2, line 2.) In *Deng*, a protocol converter converts a protocol of data packets transmitted from the LAN through the ADSL channel from a LAN protocol to an ADSL protocol and converts the protocol of data packets transmitted through the ADSL channel to the LAN from ADSL protocol to LAN protocol. In *Deng*, controlling communications through an ADSL channel is disclosed. Accordingly, *Deng* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *Deng* discloses controlling communication between a LAN and a remote device and is silent regarding aggregated Ethernet connections.

Combining *Saussy* with *White* and *Deng* would not have led to the claimed invention because *Saussy*, *White*, and *Deng*, either individually or in combination, at least do not disclose "wherein the asymmetric Ethernet communications connection is established by utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining asymmetry," as included in dependent Claim 9. Claim 18 contains a similar recitation due to its dependency on amended independent Claim 13. Accordingly, dependent Claims 9 and 18 each patentably distinguish the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of dependent Claims 9 and 18.

V. Rejection of Claims 10 and 19 Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected Claims 10 and 19 under 35 U.S.C. § 103(a) as being unpatentable over *Saussy* in view of *White* in view of *Deng* and further in view of U.S. Patent No. 6,061,357 ("*O'ishansky*"). Dependent Claim 10 is patentably distinguishable over the cited art for at least for the reason that it includes, due to its dependency on amended independent Claim 6, "wherein the asymmetric Ethernet communications connection is established by utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining asymmetry." Dependent Claim 19 contains a similar recitation due to its dependency on amended independent Claim 13. Support for the amendments can be found in the specification at least on page 5, lines 10-21.

Consistent with embodiments of the invention, an asymmetric Ethernet service may utilize aggregated Ethernet connections to increase bandwidths in data transfer directions while maintaining asymmetry. (See specification page 5, lines 10-12.) For example, an aggregator device may be positioned between a DSLAM containing modems and a downstream link to an Ethernet network. (See specification page 5, lines 12-14.)

In contrast, *Saussy* at least does not disclose the aforementioned recitation. *Saussy* merely discloses an Ethernet to asymmetric converter (EAC) includes an asymmetric link port that receives data packets from an asymmetric link. (See col. 5, lines 3-6.) The EAC forms a connection as an Ethernet port connects to a network node device. (See col. 5, lines 8-11.) In *Saussy*, the EAC provides an algorithm wherein a local Ethernet is ensured of receiving traffic and not being busy. Accordingly,

*Saussy* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *Saussy* discloses an EAC receiving data so as to not be busy and is silent regarding aggregated Ethernet connections.

In addition, *White* does not overcome *Saussy*'s deficiencies. *White* merely discloses a DSL access network in which a Asynchronous Transfer Mode (ATM) layer is removed from two interfaces, and replaced with a single Ethernet. (See col. 1, line 66-col. 2, line 1.) In *White*, the ATM is replaced with the Ethernet at a media access control (MAC) layer at the following interfaces: (a) between the customer premises equipment (CPE) and a remote Ethernet device (RED) terminal, and (b) between the RED terminal and a packet data core network. (See col. 2, lines 2-6.) In *White*, ATMs are replaced with a single Ethernet at various interfaces. Accordingly, *White* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *White* discloses replacing ATMs with Ethernets and is silent regarding aggregated Ethernet connections.

Furthermore, *Deng* does not overcome *Saussy*'s and *White*'s deficiencies. *Deng* merely discloses controlling data communication between a local area network (LAN) and a remote device through an ADSL channel. (See col. 1, line 66-col. 2, line 2.) In *Deng*, a protocol converter converts a protocol of data packets transmitted from the LAN through the ADSL channel from a LAN protocol to an ADSL protocol and converts the protocol of data packets transmitted through the ADSL channel to the LAN from ADSL protocol to LAN protocol. In *Deng*, controlling communications through an ADSL channel is disclosed. Accordingly, *Deng* does not disclose utilizing aggregated Ethernet

connections to increase data transfer bandwidths while maintaining symmetry. Rather *Deng* discloses controlling communication between a LAN and a remote device and is silent regarding aggregated Ethernet connections.

Moreover, *Olshansky* does not overcome *Saussy's*, *White's*, and *Deng's* deficiencies. *Olshansky* merely discloses an Ethernet to ADSL adapter for controlling data communication between an Ethernet port and an ADSL modem connected to an ADSL channel. (See col. 1, line 66-col. 2, line 2.) Accordingly, *Olshansky* does not disclose utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining symmetry. Rather *Olshansky* discloses controlling communication between an Ethernet port and ADSL modem and is silent regarding aggregated Ethernet connections.

Combining *Saussy* with *White*, *Deng*, and *Olshansky* would not have led to the claimed invention because *Saussy*, *White*, *Deng*, and *Olshansky*, either individually or in combination, at least do not disclose "wherein the asymmetric Ethernet communications connection is established by utilizing aggregated Ethernet connections to increase data transfer bandwidths while maintaining asymmetry," as included in dependent Claim 10. Dependent Claim 19 contains a similar recitation due to its dependency on amended independent Claim 13. Accordingly, dependent Claims 10 and 19 patentably distinguish the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of dependent Claims 10 and 19.

## VI. Conclusion

In view of the foregoing remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims. The preceding arguments are based only on the arguments in the Office Action, and therefore do not address patentable aspects of the invention that were not addressed by the Examiner in the Office Action. The claims may include other elements that are not shown, taught, or suggested by the cited art. Accordingly, the preceding argument in favor of patentability is advanced without prejudice to other bases of patentability. Furthermore, the Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 13-2725.

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